Application No.: 09/381,696 Docket No.: 22032-00035-US

REMARKS

Claims 1 and 4-18 are pending. Claims 1 and 4-12 are amended. Claims 2-3 are canceled. Claims 13-18 are withdrawn from consideration for being directed to a non-elected invention.

Claim Amendments

Claim 1 has been amended to recite that the cross-sectional shape of the first and second wall members is essentially circular. Support for this added language is found in originally filed claim 2.

Claim 1 has also been amended to recite that the first wall member and said second wall member form a continuous sliding form casting. Support for this added language is found in originally filed claim 3.

Claim 1 has further been amended to recite that the upper space is divided into part spaces forming water-filled pools. This language is supported by original claim 7 and lines 19-20 of page 8 in the specification.

Claims 1 and 4-12 have additionally been amended to improve readability. No new matter has been added to the claims.

Objection to the Disclosure

Applicants respectfully request reconsideration and withdrawal of the objection to the specification for failure to show all of the reference numbers in Figs. 1 and 2. The Examiner stated that reference numeral 8 is not shown in the figures. However, reference numeral 8 is clearly indicated in Fig. 2. Therefore, objection to the disclosure based on the alleged omission of reference numeral 8 in the figures is improper. If the Examiner based the objection on the omission of other reference numbers, Applicants request that the Examiner specifically cite the other reference numbers believed to be missing.

Claim Rejections – 35 U.S.C. §102

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1, 2, 7, 8, 10, 11 and 12 under 35 U.S.C. §102(b) as being anticipated by Van Sickel et al. (US 3,716,451).

Claim 2 is canceled, and the rejection of claim 2 is therefore moot.

In order for anticipation to exist, a reference must teach each and every element of a claimed invention. "The identical invention must be shown in as complete detail as is contained in the... claim". *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989).

Claim 1, as amended, recites:

> - a reactor containment formed by a first wall member defining an inner space;
>
> - a reactor vessel housing a reactor core and being located in the inner space; and
>
> - an upper space located above the reactor containment and defined by a second wall member, wherein the first wall member and the second wall member have, viewed in a horizontal section, an essentially identical cross-sectional shape and form an essentially common cylinder, wherein said cross-sectional shape is essentially circular, wherein said first wall member and said second wall member form a continuous sliding form casting, and wherein said upper space is divided into part spaces forming water-filled pools.

The device of claim 1 can be constructed in a more simple and efficient manner than known nuclear reactor devices, and thereby reduces construction time. Claim 1 recites a reactor containment formed by a first wall member and an upper space formed by a second wall member, wherein the upper space is located above the reactor containment and is divided into

part spaces forming water-filled pools. As set forth in claim 1, the first and second wall members form a continuous casting. The water-filled pools may be used for housing fuel, internal parts from the reactor vessel and other equipment during revision of the plant. The claimed device also recites that the first and second wall members have essentially identical, circular cross-sectional shapes. Thus, first and second wall members can be manufactured in one casting operation as the casting form slides upwards (i.e., only one sliding form is utilized in the casting operation). In addition to significantly reducing the construction time required for building a reactor containment and the upper space, the circular cross-sectional shape has a high strength and may carry large loads and withstand large pressure changes.

The patent to Van Sickel et al. shows a nuclear plant for a pressure water reactor 22. The reactor is surrounded by a wall 20 which is surrounded by an outer wall 16, 17. The walls 20, 16 and 17 are housed within an outer wall 12 forming the reactor containment (see col. 3, lines 51-59). The outer wall 12 has a lower outer cylindrical part and a dome-shaped upper part. The lower outer cylindrical part and the dome-shaped outer part do not have essentially identical circular cross-sections as recited in claim 1. Furthermore, in the cross-sectional view of Fig. 1 of Van Sickel et al., it is clear that the wall 17 ends before the top of the walls 16 and 17, and that the walls 16 and 17 are broken by a passage formed by two thick, parallel walls extending radially outward through the walls 16 and 17. Thus, the walls 16 and 17 do not form a continuous sliding form casting, as recited in claim 1, nor could the containment of Van Sickel et al. be manufactured by means of a single continuous sliding form technique without significantly altering the design of the reactor.

Additionally, Van Sickel et al. does not appear to include an upper space above the floor 24 housing water-filled pools within the walls 16 and 17, as recited in claim 1.

For at least the reasons set forth above, the Van Sickel et al. disclosure does not teach every element of claim 1, and therefore does not anticipate claims 1, 7, 8 and 10-12.

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 1-3 and 6-12 under 35 U.S.C. §102(b) as being anticipated by Kleimola (US 4,050,983).

Claims 2-3 are canceled, and the rejection of claims 2-3 is therefore moot.

Kleimola discloses a nuclear reactor 20 arranged in a reactor building 12. The reactor building 12 defines a primary space and therefore corresponds to the containment recited in present claim 1. The reactor building 12 has a partly cylindrical shape, which does not extend from the bottom to the upper end of the reactor building 12. For example, in Fig. 4 it is clear that the cylindrical shape is interrupted by an outwardly extending cask transfer lock 102. Thus, Kleimola does not teach first and second wall members having essentially identical circular cross-sections and the reactor building is not a continuous sliding form casting, as recited in claim 1. Even if the Kleimola reactor could be formed by a single continuous sliding form technique, Kleimola does not teach or suggest such a possibility.

Furthermore, Kleimola does not disclose an upper space arranged above the containment and a space arranged to house water-filled pools as recited in present claim 1.

For at least the reasons presented above, Kleimola does not teach all of the elements recited in present claim 1, and does not anticipate claims 1 and 6-12.

Claim Rejections – 35 U.S.C. §103

Applicants respectfully request reconsideration and withdrawal of the rejection of claim 3 under 35 U.S.C. §103(a) as being unpatentable over Kleimola in view of Heinzle (CH 472558).

Claim 3 has been canceled. Thus, the rejection of claim 3 is moot. Claim 1 now includes the limitations of canceled claim 3.

In order for a claimed invention to be obvious, all of the claim recitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 974). Kleimola fails to teach the invention of claim 1 for the reasons stated above. Heinzle discloses sliding form casting of buildings. However, Heinzle does not teach or suggest sliding form casting for building a cylindrical wall for housing a nuclear reactor and water-filled pools. Heinzle further fails to teach the other elements of claim 1 that are missing in the Kleimola disclosure.

Therefore, the combination of the teachings of Kleimola and Heinzle does not result in the claimed invention, and claim 1 is not obvious.

Applicants respectfully request reconsideration and withdrawal of the rejection of claims 4-5 under 35 U.S.C. §103(a) as being unpatentable over Kleimola in view of Heinzle, and further in view of Harstead (US 4,175,005).

Kleimola and Heinzle fail to teach the device recited in claim 1 for the reasons stated above. Harstead discloses a nuclear reactor containment similar to the containment disclosed by Van Sickel et al. Harstead also has a cylindrical lower part and a dome-shaped upper part. Thus, the lower outer cylindrical part and the dome-shaped outer part do not have essentially identical circular cross-sections as recited in claim 1. Therefore, contrary to the claimed invention, the containment of Harstead cannot be part of a continuous sliding form casting. For the aforementioned reasons, Harstead does not teach or suggest the elements of claim 1 that are not taught by Kleimola and Heinzle. Thus, claims 4 and 5, which depend from claim 1, are patentable over the combined teachings of Kleimola, Heinzle and Harstead.

Conclusion

In view of the above amendment, applicant believes the pending application is in condition for allowance.

Applicants believe no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 22-0185, under Order No. 22032-00035-US from which the undersigned is authorized to draw.

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